

**Manalapan Mining Company, Inc.**

**PHONE 606-573-1211**

**FAX 606-837-3773**

October 17, 2008

Mr. Ross Bishop  
KPDES Branch  
Division of Water  
14 Reilly Road  
Frankfort, KY 40601-1190

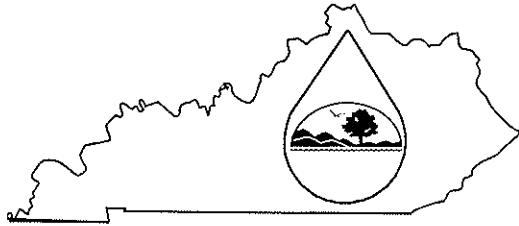
RE: Manalapan Mining Company, Inc.  
Permit #848-5448 Original  
Form HQAA

Please find attached, the corrections for the above referenced permit application. These corrections have also been emailed to you. If you have any questions please contact me by replying to the email or by phone at 606-573-1211 ext. 29.

Sincerely,

Dennis Wilson  
Manalapan Mining Company, Inc.

# KPDES FORM HQAA



## Kentucky Pollutant Discharge Elimination System (KPDES)

### High Quality Water Alternative Analysis

The Antidegradation Implementation Procedures outlined in 401 KAR 5:030, Section 1(3)(b)5 allows an applicant who does not accept the effluent limitations required by subparagraphs 2 and 3 of 5:030, Section 1(2)(b) to demonstrate to the satisfaction of the Environmental and Public Protection Cabinet that no technologically or economically feasible alternatives exist and that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the water is located. The approval of a POTW's regional facility plan pursuant to 401 KRS 5:006 shall demonstrate compliance with the alternatives analysis and socioeconomic demonstration for a regional facility. This demonstration shall also include this completed form and copies of any engineering reports, economic feasibility studies, or other supporting documentation

#### I. Permit Information

<b>Facility Name:</b>	Manalapan Mining Company, Inc.	<b>KPDES NO.:</b>	Pending DNR # 848-5448
<b>Address:</b>	PO Box 311	<b>County:</b>	Harlan
<b>City, State, Zip Code:</b>	Brookside, KY 40801	<b>Receiving Water Name:</b>	Jackson Mill Creek Tributary of Puckett Creek

#### II. Alternatives Analysis

- |                                                                                                                                                                                                                           | <u>Yes</u>                          | <u>No</u>                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|--------------------------|
| 1. Has discharge to other treatment works been investigated?<br>(If yes, then indicate which treatment works were considered and the reasons why that discharge to these works is not feasible.)<br><b>See Attachment</b> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Have other discharge locations been evaluated?<br>(If yes, then indicate what other discharge locations have been evaluated and the reasons why these locations are not feasible.)<br><b>See Attachment</b>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

**Item 1 Continued.**

The proposed permit area was inspected for existing treatment works, sediment ponds and disturbed areas. No existing sediment pond was found. One sediment pond is proposed for use under this permit application. It is proposed to be built on bench and out of all streams. This pond was located in an area that was previously disturbed by pre-law mining and logging.

A sediment pond is proposed to control drainage from rainfall events at this small operation site. We will call this option 1. It is estimated that the sediment pond will cost approximately \$20,000 to build and another \$30,000 to 40,000 dollars to maintain and sample throughout its life. The cost for pond removal is estimated at approximately \$10,000. This total cost would then be approximately 70,000 dollars.

As stated the proposed permit area was inspected for existing treatment works – no existing sediment ponds were found in the vicinity of this area. The closest wastewater treatment plant was also considered and was found to be located in Pineville Kentucky. This treatment facility is approximately 21 miles from the proposed permit area. The investigation of this option 2 revealed that 110,880' of pipeline would have to be installed to transport the discharge to this facility. This water transport piping would have to be buried to prevent freezing. So it is estimated that a minimum of an 8' wide disturbance would be created to bury this piping. This disturbance would then be:

$8' \times 110,880' = 887,040 \text{ sq.ft. or } 20.36 \text{ acres.}$  This disturbance is greater than the entire surface permit area, which is only 19.92 acres. The installation process would cross a minimum of 22 blue line streams, which would also create multiple drainage problems that would have to be permitted (the pipe would have to be buried through these stream areas to

Item 1 Continued.

prevent freezing) Also the cost of this alternative was also investigated. Piping installed to a sufficient size to transport the drainage is estimated to cost installed, with all right-of-ways, supplies and construction, a minimum of \$50.00 per foot. This would be a cost of 5,544,000 dollars to run the 110,880 feet of pipe needed ( $\$50 \text{ per ft.} \times 110880 \text{ ft.} = 5,544,000$ ). This piping would also have to be removed at the completion of underground mining. The cost to do this would be a minimum of \$20 dollars per foot plus inflation and would result in an additional \$2,217,600. The wastewater treatment plant would also have to install sediment-settling ponds to handle this discharge. This cost would also be added to this option. So this option would result in a cost of over \$7,761,600 and would disturb 20.36 acres plus stream areas. The entire permit area proposed is only 19.92 acres. This alternative is \$ 7,691,600 more than option 1 above. Other options such as tanks, tankers and channeling were also investigated were much more expensive than this option. The use of tankers on the small roads in this area would create additional traffic hazards for the local community and unneeded additional exhaust pollution. Tankers of sufficient size to transport this discharge over the 21 miles to the local treatment works would cost approximately 100,000 dollars each, fuel for these trucks would depend upon the amount of rainfall received but it is estimated that each one would cost 40,000 dollars per year in fuel alone if used throughout the year. If 5 tankers were used, this would be a cost of 200,000 dollars per year. Drivers for these tankers would cost approximately \$ 50,000 per year and for five tankers this would be \$250,000. The total cost for this option would be  $(19.5 \text{ years} + 2 \text{ years for revegetation}) * (\$450,000 \text{ per year for fuel-drivers}) + \$ 500,000$  initially for tankers this cost would be \$10,175,000. This option would also be dependent upon smooth traffic flow with out any interruptions. If you have driven these roads you know that continuous smooth traffic flow is not possible due to

**Item 1 Continued.**

accidents, road construction and many other factors. This would mean that drainage would have to be contained by tanks or with the design of a holding pond of sufficient size that it would not discharge during a 25-year storm. This size storm would deposit 5.1 inches of rain on this area in 24 hours. This pond is further sized under Item 3.

## Item 2 Continued

Alternative pond locations were considered, but were eliminated due to topography, soil conditions or were in areas that would create more environmental impact. As shown on the attached MRP of the proposed operation, the pond was designed as close to the proposed permitted area, yielding the least possible environmental impact and discharge.

Alternative discharge locations were examined in two (2) ways. First they were examined by moving the underground mine site. As shown on the pictures previously submitted, the mine site and discharge location were chosen so a pre-law mined area with an existing highwall and benches could be used to access the seam for underground mining and be reclaimed when mining is completed. The area with the least possible drainage and discharge was chosen. If this entire mine site were moved to different location on this property the drainage and discharge would be greater. Also if we move it off this pre-law disturbed area, an undisturbed area would be disturbed and exist in addition to this pre-law mined area, creating more disturbed area, discharge in this watershed. All mine site areas located on this property would result in discharge to Puckett Creek a tributary to the Cumberland River.

The possibility of pumping the discharge from this area to other discharge locations over the mountains to the north or south was also investigated. In addition to a cost of over \$ 4,000,000 to install piping and pumping stations, the disturbance for access roads and to bury this line would still be in this watershed and would be  $(20,000' \times 8' \text{-line}) + (20,000' \times 12' \text{-road}) = 400,000 \text{ sq., ft.} = 9.18 \text{ acres}$ . If this drainage were pumped to the north it would enter Foresters Creek a tributary of the Cumberland River and if pumped over the mountains to the south it would enter Brownies Creek a tributary of the Cumberland River. The current discharge location is in Jackson Mill Creek a tributary to the Cumberland River. All discharge points would still lead to the Cumberland River because all three (Jackson Mill Creek, Foresters Creek and Brownies Creek) all are tributaries of the Cumberland river. We would not want to discharge into Brownies Creek because it is a higher quality stream.

**Item 2 Continued**

**So these alternate discharge points would all lead to the Cumberland River and the construction disturbance for these alternatives would add additional disturbances to these watersheds.**

## II. Alternatives Analysis – continued

3. Has water reuse or recycle been investigated as an alternative to discharge?  
(If yes, then provide the reasons why it is not a feasible alternative)

Yes

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No

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**See Attachment**

4. Have alternative process or treatment options been evaluated?  
(If yes, then indicate what process or treatment options have been evaluated and provide the reasons they were not feasible.)

Yes

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No

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**See Attachment**

### Item 3 Continued

Some of the water in the sediment pond will be used for fugitive dust control. However, during storm events more water will be generated, necessitating discharge. There are no other facilities on site (such as a preparation plant) that will require a raw water source. On a dry day dust suppression would use only about 15,000 gallons. Also during reclamation and hydro seeding 10,000 gallons of water will be used per day. But since this is only a small mine site this will only be needed for two to three days. The mine site drainage and pond location were designed to disturb the smallest watershed possible. With this design the pond will only discharge during rainfall events of sufficient size to saturate the small drainage area, and fill the pond beyond the discharge point. This Mine Site, Stockpile Area and Pond locations are currently disturbed (7.46 acres) but with no existing sediment control.

The discharge from this area will be 104.89 cubic feet per second for a peak storm. In order to recycle this water and because we cannot control mother nature, tanks of sufficient size would have to be installed to hold this water over week ends or other times when dust control (our only need for recycling storm water) was not necessary. The amount of water to be held would then be  $104.89 \text{ cubic feet per second} \times 60 \text{ seconds per minute} \times 60 \text{ minutes per hour} \times 24 \text{ hours for one day} = 9,062,496 \text{ cubic feet per day}$ . This would then be  $9,062,496 \text{ cubic feet of water} \times 7.48 \text{ gallons per cubic foot} = 67,787,470 \text{ gallons for one day and one 25 year - 24 hour storm event}$ . So most water tanks (or if stored in septic tanks) are 1,000 gallons. It would take  $67,787,470 \text{ gallons} / 1000 \text{ gallons per tank} = 67,787 \text{ tanks per storm day}$ . At a cost of purchasing and installing each tank of \$500.00 per tank this cost would be  $67,787 \times \$500 = \$33,893,500 \text{ dollars}$ . This would only be the cost of storing the water additional cost would be incurred when pumping this water out to use for dust control. And if these men were on vacation during a rainy week then this

### Item 3 Continued

option would have to be increased for this situation. This same cost would apply to septic tanks if used for subsurface disposal along with the additional cost of drain fields and drain field installation. However if a heavy rain comes at a time when additional rain (runoff) is currently stored (worst case) this sizing would have to be increased. A pond constructed to hold this one day storm without discharge, would have to hold 9,062,496 cubic feet / 43,560 square feet per acre = 208 acre feet (An MSHA – High Hazard Impoundment). This size facility would put residents and travelers down stream below this location at unnecessary risk and also incur costs of MSHA approval and construction. This would also disturb additional area:  $9,062,496 \text{ cu.ft.} / 50 \text{ ft deep} = 181,249.9 \text{ sq.ft.} = 4.16 \text{ acres}$  of additional disturbance. The cost for the engineering design (\$100,000), construction (\$900,000), maintenance (\$600,000) & reclamation (\$400,000) would come to approximately \$2,000,000.

#### **Item 4 Continued**

The proposed mining operation falls under 405 KAR 1:200, Section 1(2) which precludes any type of treatment other than sediment ponds for disturbed areas greater than 1 acre, 405 KAR 16:060, Section 2 & 405 KAR 16:070. However as shown previously alternative treatment or discharge to alternative treatment has been investigated. Straw bales and silt fences were also investigated but these methods are for very small areas and do not control sediment as effectively as settling ponds. However these will be used as needed in addition to the sediment pond proposed.

Alternate processes and treatment have previously been discussed but this attachment will deal with additional ones so all known options are evaluated. First we will consider pumping this discharge into abandoned mines. This process is extremely expensive and requires approval from MSHA and the EPA. The underground mines in this area that have the capacity to store water are currently full to their storage point. Additional pumping of water into any mine will simply displace water and still create a discharge. Secondly applying additional water pressure to old mines that were mined with out leaving an outcrop barrier would be hazardous and would create a potential of a mine blowout. Another option would be to inject the discharge into subsurface areas that do not have underground mines. This option is not valid for this area because mining has occurred in all seams from the Harlan Seam up to and including the Wallins Creek and Smith coal seam in and around this area for miles. For this reason the same factors and costs as discussed for alternate discharge points would apply to this analysis. Water would have to be pumped for miles to a suitable location. In addition to the collection and pumping cost, many additional costs would be added. These included Subsurface investigation, Percolation

**Item 4 Continued**

testing, Installation of ground water well networks, Determination of depth to ground water and seasonal variations, Ground water analysis to evaluate the response of the water table to hydraulic loading beneath absorption fields, and Assessments of ground water quality and potential impacts from subsurface wastewater disposal. The construction of a waste water treatment plant was also evaluated. The cost of plant construction would be over 1,000,000 dollars. Plant operators, pumping and dismantling would also add additional costs. A plant operator over a 20 year period would cost 40,000 dollars per year x 20 years = \$ 800,000. Construction of other sediment control facilities would also not meet the regulations for underground mine sites. This proposal is for an underground mine, if this seam were mined by surface mining methods, additional drainage areas and discharges would occur.

## II. Alternatives Analysis – continued

5. Have on-site or subsurface disposal options been evaluated?  
(If yes, then indicate the reasons they were not feasible.)

Yes

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No

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**See Attachment**

6. Have any other alternatives to lowering water quality been evaluated?  
(If yes, then describe those alternatives evaluated and provide the reasons why these alternatives were not feasible.)

Yes

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No

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**See Attachment**

## **Item 5 Continued**

The amount of surface runoff can not be disposed of on site due to soil limitations and steep slopes, the surrounding area will be saturated with rain during a peak runoff period. The stress relief fracture system in this area transmits water through the open fractures and discharges it at the near surface fractures. So if this water were pumped underground we would only be changing the discharge point and also not allow settling time for the treatment of the discharge.

Subsurface or on site options are limited to pumping to abandoned underground mines or injecting water into underground absorption fields. First we will consider pumping this discharge into abandoned mines. This process is extremely expensive and requires approval from MSHA and the EPA. The underground mines in this area that have the capacity to store water are currently full to their storage point. Additional pumping of water into any mine will simply displace water and still create a discharge. Secondly applying additional water pressure to old mines that were mined with out leaving an outcrop barrier would be hazardous and would create a potential of a mine blowout. Another option would be to inject the discharge into subsurface areas that do not have underground mines. This option is not valid for this area because mining has occurred in all seams from the Harlan Seam up to and including the Wallins Creek and Smith coal seam in and around this area for miles. For this reason the same factors and costs as discussed for alternate discharge points would apply to this analysis (a cost of over \$4,000,000 to install piping and pumping stations). Water would have to be pumped for miles to a suitable location. In addition to the collection and pumping cost, many additional costs would be added. These included Subsurface investigation, Percolation testing, Installation of ground water well networks, Determination of depth to ground water

#### Item 5 Continued

and seasonal variations, Ground water analysis to evaluate the response of the water table to hydraulic loading beneath absorption fields, and Assessments of ground water quality and potential impacts from subsurface wastewater disposal.

The installation of a sanitary septic system (septic tanks) was previously evaluated with the cost shown. Area for the drain fields required for each tank (1 acre each) could also not be located on the steep, mountainous area surrounding this mine site. The sediment collected in this system would also not decompose and eventually stop up the system – more disturbed drainage area would then be created by digging up the tanks and drain fields (far more than the mine site disturbs). The possibility of drilling injection wells was also evaluated. In addition to the cost no suitable locations exist within a reasonable distance from this site. All evaluated options would not be adequate over the long-term. The stormwater must be discharged from the project site.

## **Item 6 Continued**

The proposed underground mine site area has existing mining and logging disturbance. The entire mine site and facilities proposed were pre-law disturbed (7.46) acres. Both roads proposed to access this site are also existing (12.46 acres). Also the entire watershed has existing mining and logging disturbance. The mining and reclamation plan proposed under this application would correct many existing factors that have lowered water quality at this site. The previously disturbed area is not currently controlled by a sediment structure. The active mine site with sediment control (dugout pond) will discharge a better quality water than the pre-law mined area as it exists currently, according to the SEDCAD model for both conditions. The current pre-law disturbed area has no sediment control. The plans as proposed under this application would correct many existing problems in this area and bring the surface areas up to current reclamation standards. See the previously submitted pictures for existing disturbed areas. The permit area was designed to be out of all streams, and the current eroding roads will be upgraded with drainage controls to prevent the large scale erosion currently occurring. As permitted - the storm water will be maintained in a dugout pond prior to discharge. This will allow settling to occur and this will minimize (based on current regulations) the lowering of water quality. As previously discussed - alternatives for no discharge were evaluated. These alternatives are piping, trucking, septic systems, tanks for recycling, building MSHA class impoundment to hold all discharge, pumping into abandoned mines, injection wells, and etc. All alternatives and costs are previously listed. The other alternative would be not mining this area. This alternative would create lost jobs at this site and lost related goods and services jobs, lost economic development, lost tax revenues, lost health plans, and etc.

Another alternative would be to accept the more stringent limits. This would cause the iron requirement alone to go from 1.0 to 0.50 mg/l. To maintain these limits a continuous addition of soda ash and lime would have to be dispensed for treatment. Accordingly to a test run in ADMtreat 4.0 (this program can be obtained and downloaded at <http://amd.osmre.gov>), to maintain these limits would cost approximately \$ 700,000 more than the current cost for the iron limit alone. Withstanding the fact that the lowering of limits wants to be avoided, the cost is quite steep per charge and possibly becomes a deterrent to the mining operation.

### III. Socioeconomic Demonstration

1. State the positive and beneficial effects of this facility on the existing environment or a public health problem.

**See Attachment**

2. Describe this facility's effect on the employment of the area

**See Attachment**

3. Describe how this facility will increase or avoid the decrease of area employment.

**See Attachment**

4. Describe the industrial or commercial benefits to the community, including the creation of jobs, the raising of additional revenues, the creation of new or additional tax bases.

**See Attachment**

5. Describe any other economic or social benefits to the community.

**See Attachment**

## Item 1 Continued

The proposed mining area has existing mining and logging disturbance. The mining and reclamation plan proposed under this application would correct many existing factors that have lowered water quality at this site and allow the installation of sediment control (dug-out sediment pond) until the mining is complete and the area is reclaimed and revegetated. The previously disturbed area is not currently controlled by sediment structures. The plans as proposed under this application would correct many existing problems in this area and bring the surface areas up to current reclamation standards. See the previously submitted pictures for existing disturbed areas. The permit area was designed to be out of all streams, and the current eroding roads will be upgraded with drainage controls to prevent the large scale erosion currently occurring. Alternate sediment control, on site disposal, and recycling were all considered and will be employed in addition to the sediment pond. However the small amount of water recycled for dust control and road compaction will not be enough to prevent the sediment pond from discharging during a major precipitation event.

One positive effect this operation will have on public health is that the employees at this operation will have health insurance. Recovery of the coal (3,000,000 tons) will increase severance tax revenues (by 1,050,000). This revenue can be used by Harlan county (approx. 15% returned to county = 157,500 dollars) for environmental protection such as sewage disposal, solid waste disposal, and land reclamation, which will benefit the environment of Harlan County.

## Item 2 Continued

This facility will allow for the employment of approximately 20 people when started. Once started underground and as the advancement will allow, a second section will be added. This will create approximately 20 new jobs. In addition to the these underground mining jobs there will also be approximately the same number of jobs created and maintained in related goods and services. After the second section is added the total number of jobs for Harlan County will be 80. The current unemployment rate for Harlan County is  $1,003(\text{unemployed})/10,384(\text{labor force}) = 9.7\%$  Without this operation this becomes  $1,023/10,384 = 9.9\%$  With this operation and after the second section is added this becomes  $983/10,384 = 9.5\%$  . The jobs created will also be higher paying jobs. An underground coal miner in Harlan county earns an average wage of \$20 per hour which is 100% more than most all other non mine related jobs in the county. With benefits such as life insurance and health insurance.

### Item 3 Continued

As shown above with out this operation and with the current statistics the employment will rise to 10.67%. With this operation and after advancement allows for the start of a second section the current rate of 9.7% will fall to 9.5%. This mine will directly employ approximately 20 people at the start of operations. After underground advancement penetrates this seam approximately 2,000 feet then a second section will be started which will allow for the creation of approximately 20 new jobs. Non-issuance of this permit will result in the layoff of these employees. In addition to direct jobs created, their will also be jobs in related goods and services that will also be maintained. This operation represents approximately 3 percent of all underground mining jobs in the county. These jobs are worth over 60,000 dollars per year to each employee with benefits adding up to approximately 60% of wages (\$36,000) for a total of \$96,000 per employee year. The life of this operation will be approximately 19.5 years. This operation will provide the following employee wages and benefits over its life: 19.5 years X 40 employees X \$96,000 = \$74,880,000

The local, state severance , and federal taxes will also help with programs for employment training. Harlan county is currently turning mined lands into a future for this area by developing recreations parks for rock crawlers and ATVs. Some of the tax money returned to the county will provide for continuing these type projects which will aid in employment opportunities after the coal and mining jobs have been exhausted in this area.

#### Item 4 Continued

This mine will directly employ approximately 40 people and indirectly affect another 40 due to related goods and services. This operation will provide a variety of both state and local tax revenues and increase the property value of the land being mined. Property values increase when land is active. Therefore, when mining is being conducted, the land has an increased value, which increases property taxes paid. Upon final reclamation of this area, this site will again be productive and indirectly affect employment for this area because it proposes to create additional wildlife habitat. This creation of a long term post mining land use of wildlife habitat will be a great improvement to the existing land condition while reclaiming the previous logging and pre-law mining disturbance in the permit area. This operation has been permitted to extract approximately 3,000,000 tons of coal. Recovering this coal should produce severance tax in the amount of \$1,050,000. Approximately 15 percent of this tax should be returned to Harlan county. This would be \$157,500 to provide funds to establish alternative industries, as well as provide for public safety, environmental protection, public transportation, vocational training, health and recreational facilities, social services, industrial/economic development, and workforce training. Harlan county has also used those funds to improve law enforcement and battle the drug problems in this area, for fire protection, ambulance services, libraries, educational facilities, and public parks. This money will be used by the county to aid public utilities and services (drinking water, sewage, road improvement, ect), establish new or expanded industry opportunities, and other benefits to the community. When coal land is active unmined minerals and other taxes increase which creates an

additional new tax base. The local economy will enjoy employee benefits and wages of 74,880,000 dollars during the next 19.5 years. This prolonged addition to the economy will allow for continued growth and time for additional industry to be started and developed for continued employment opportunities in this area.

## Item 5 Continued

This mine will directly employ approximately 40 people and indirectly affect another 40 due to related goods and services. This operation will provide a variety of both state and local tax revenues and increase the property value of the land being mined. Upon final reclamation of this area, this site will again be productive and indirectly affect employment for this area because it proposes to create additional wildlife habitat. This creation of a long term post mining land use of wildlife habitat will be a great improvement to the existing land condition while reclaiming the previous logging and pre-law mining disturbance. The coal mined will be assessed severance tax which will be returned to the community as previously discussed. This money will be used by the county to aid public utilities and services (drinking water, sewage, road improvement, ect), establish new or expanded industry opportunities, and other benefits to the community. When coal land is active unmined minerals and other taxes increase which creates an additional new tax base. The local economy will enjoy employee benefits and wages of 74,880,000 dollars during the next 19.5 years. This prolonged addition to the economy will allow for continued growth and time for additional industry to be started and developed for continued employment opportunities in this area. This operation will also require supporting jobs as well as mining jobs. Equipment sales and repair, mining and engineering consultants, fuel and transportation providers and many others. This operation also provides wages which allow our employees to support businesses not related to mining in Harlan and the surrounding counties. This helps employ people in non-mining jobs. The increased property tax payments will benefit area schools so they can have better equipment and teachers. After mining is completed the reclaimed area can support many outdoor recreational activities.

### III. Socioeconomic Demonstration – continued

- |                                                                                        | <u>Yes</u>                          | <u>No</u>                           |
|----------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------|
| 6. Will this project be likely to change median household income in the county?        | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 7. Will this project likely change the market value of taxable property in the county? | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 8. Will this project increase or decrease revenues in the county?                      | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 9. Will any public buildings be affected by this system?                               | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

10. How many households will be impacted by this project? **See Attachment**

11. How will those households be impacted?

**See Attachment**

- |                                                                                                                      | <u>Yes</u>               | <u>No</u>                           |
|----------------------------------------------------------------------------------------------------------------------|--------------------------|-------------------------------------|
| 12. Does this project replace any other methods of sewage treatment to existing facilities?<br>( if so describe how) | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

**See Attachment**

- |                                                                                                          | <u>Yes</u>                          | <u>No</u>                |
|----------------------------------------------------------------------------------------------------------|-------------------------------------|--------------------------|
| 13. Does this project treat any existing sources of pollution more effectively?<br>(If so describe how.) | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

**See Attachment**

#### Item 10 Continued

As the wages and benefits of the underground coal miner are far above all other employment opportunities in this area the jobs saved and created will increase the wages of the 40 employees and affect their household by increasing wages approximately 100 percent over other alternatives in this area. Also the benefits offered will allow for these 40 household to have medical insurance and other benefits that other jobs in Harlan County do not offer. The employees will be impacted positively with a more secure place of employment and a higher than average Harlan county wage. These earnings will help these households to maintain or enhance their current economic status. As approximately one half of these jobs will be new jobs, twenty current unemployed miners will have a place to work. Households of local businesses will also benefit from the spending of these employees. Related goods and services employees will benefit from this operation. Total households affected = 40 direct jobs + 40 related services jobs + 80 area business jobs = 160 households will benefit.

**Item 11 Continued**

By increasing all households with one employed person to twice the income as most all other jobs in Harlan County. By benefits including health insurance for there families. The benefit packages offered amount to a minimum of 60% of wages. These households would not have medical insurance if not for these jobs. The local businesses will benefit from the increased spending power of these employees. Jobs in related goods and services will benefit in increased sales and employment.

**Item 12 Continued**

This project will not include any sewage treatment facilities. There is no existing sewage, wastewater discharges that this project could replace. The residents of this local area are currently not on a municipal sewage treatment facility. Taxes generated by this operation could provide revenue in the form of severance taxes, which could be used by local and state government to help provide these services for this area.

**Item 13 Continued**

**This site is currently disturbed without drainage control in place to correct or help correct the current sediment being discharged. With the installation of the sediment pond this site will have control and treatment for the existing sources of pollution. As this site was completely pre-law disturbed sediment control from this prior mining will be improved. This operation and sediment pond will also provide sediment control for the logging that has taken place in the permit area. This area of pre-law mine disturbed and logged area will be controlled by the sediment pond installed.**

### III. Socioeconomic Demonstration – continued

14. Does this project eliminate any other sources of discharge or pollutants?  
(If so describe how.)

Yes

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No

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**See Attachment**

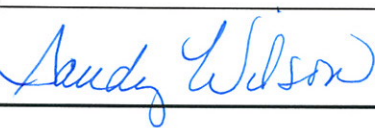
15. How will the increase in production levels positively affect the socioeconomic condition of the area?

**See Attachment**

16. How will the increase in operational efficiency positively affect the socioeconomic condition of the area?

**See Attachment**

**IV Certification:** I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

<b>Name and Title:</b>	Sandy Wilson, Secretary Treasurer	<b>Telephone No.:</b>	( 606 ) 573 -1211
<b>Signature:</b>		<b>Date:</b>	10-20-08

Item 14 Continued

This operation proposes to reclaim 7.46 acres of previously disturbed area, install drainage controls in existing roads and reclaim previously disturbed areas. After reclamation the current (pre-mining) higher rates of effluent contamination will be greatly reduced. During mining and as stated before – the sediment pond will treat this discharge more effectively. Please note that no stream disturbance is proposed.

When completed this project reclaims the existing pre-law mining disturbance and brings this area up to current reclamation standards. This will include the removal of old garbage left behind when this area was pre-law mined. Instead of viewing an existing bench and highwall with little or no vegetation the local residents will view a reclaimed area with vegetation and trees. This area currently has no soil in place and drainage currently is directed across this area and results in discharge. After reclamation this area will again be absorbent and any rainfall events will be retained in the soil until saturated to promote tree and vegetative cover. Drain patterns will be established to prevent erosion. Once this is accomplished and the site is completely revegetated the sediment pond will no longer be necessary and will also be removed with complete reclamation and revegetation. This will also benefit all residents and people passing, due to the improvement of the viewsheds of the area.

**Item 15 Continued**

**The increase in production levels will be the result of mining and construction the mine site and sediment pond in this area. This operation proposes to mine approximately 3,000,000 tons of low sulfur coal, which is needed to continue the electrical generation of our area and the surrounding areas. This will generate high paying jobs, generate coal severance tax, and additional employment opportunities in the Harlan County area. Also the increase in production levels will be accomplished by adding an additional section as the initial advancement will allow. This will mean twice the employment opportunities will be created by the disturbance in this watershed. As previously described these are high paying jobs with benefit packages. This operation will generate additional tax revenue for this area and county as well as state programs. Will allow for related goods and services jobs to be maintained and created. Will allow for businesses in the local area to enjoy additional revenue from these employees and related goods and services employees. All of these additional wages and taxes will aid in the economic development of this area as well as increase benefits to all residents in the form of public services improved by increased tax revenues.**

## Item 16 Continued

As stated before this underground mine will allow for mining a large area while only disturbing a small mine site, stockpile area and related facilities. The effect of this will prolong jobs and tax revenues while disturbing only 7.46 acres. The operational efficiency of mining 950 acres of underground area while only disturbing 7.46 acres gives a disturbance to operation area ratio of over 127.3 operating acres per 1 acre of disturbance. Not many if any other industries can be so efficient. The following examples are given:

Agriculture - One acre of disturbance for one operational acre.

Most all other industries are no more than three to five stories, if that, this would only be: - One acre of disturbance for five acres of operational area.

If a factory were built on and disturbed one acre of land, then to achieve the same disturbance to operational area – it would have to be 127.3 stories high.

If this operation mines 48.7 acres per year then jobs created will last  $950 \text{ acres} / 48.7 \text{ acres per year} = 19.5 \text{ years}$ . This would mean 40+ jobs at the mine and many more in related goods and services would last 19.5 years for this small investment in a pre-law disturbed area.

This increase in operational efficiency will provide long-term production levels leading to increase employment opportunities in the area, maintenance of existing employment, development and maintenance of indirect jobs and increase in the amount of severance tax and personal tax the area receives.

This operation also proposes to reclaim pre-law disturbed area and establish vegetation with trees to create a diverse habitat for wildlife. This will eliminate the existing environmentally damaged area and enhance the viewshed. This operation will also provide needed coal to help eliminate our dependence on foreign energy supplies, and help with our nation's energy crisis.